

Amateur TRW radio Club WB6WPO

cross talk

A MONTHLY NEWS BULLETIN OF TRW AMATEUR RADIO CLUB

Sponsored by Systems Employee Association

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TRW/ARC Net Saturdays

7,280 MHz, 1000 PDT



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AUGUST MEETING

DINNER AT THE FORTUNE ROOM

SEE SPECIAL BULLETIN
IN YOUR MAILBOX!

THE PREZ SEZ

By PAUL WEISZ, K6YQ

Every now and then, the powers that be shake the box and change amateur radio. In my capacity as dirty old man, I can remember the reshuffling of the ham bands after the war (when we got 15 meters), the initiation of the present licensing structure, the removal of incentives for higher class licenses, and the reestablishment of the incentive licensing scheme. Things are not as stable in this hobby as some of the newcomers might believe.

Each time that change occurred, it was possible to convince oneself that it was all for the best. At no time in my recollection was the amateur required to justify the existence of the Amateur Radio Service; our record of meritorious military and

defense-related work, our performance in emergencies, and the technical advances to our credit in equipment design and operating techniques spoke eloquently for us. By and large, the public, the government and the FCC looked upon us with favor. Things have apparently changed, and we are now firmly on the defensive.

In the August issue of QST, there are two articles of unusual interest. One deals with the proposed contamination of the amateur 220 MHz band with a new Class E Citizens Radio Service (discussed elsewhere in this issue of Crosstalk). The other (Page 75) is an article by the best devil's advocate that ham radio has ever had, A. Prose Walker, head of the Amateur and Citizens Radio Division of the FCC.

Mr. Walker asks a series of searching questions, and seems to be pointing the way to a set of disturbing answers. Some of the issues raised appear to be trivial (the license examination system, the conditional class licensing situation, "experimental" subbands) in that they do not affect the fundamental fabric of ham radio. Some of the other matters, however, seem to indicate that we are going to be at the mercy of the analysts and optimizers who have already spoiled the flavor of so many aspects of our daily lives.

EXAMPLES:

How can we "enable maximum utilization . . . to provide emergency communication . . . ?" Well, amateurs have been responding brilliantly to emergencies ever since radio became a useful communications tool. Government-imposed requirements are likely to take the edge off the enthusiastic volunteer efforts that now exist, in my opinion.

" . . . is it judicious or unwarranted to ask the amateur service to accept certain technical standards applicable to either their commercial equipment or their emissions on the air . . . ?" Well, the operating amateur is one of the most merciless critics (of other people's signals) in existence. Signals from U.S. stations are generally of very high quality, in my estimation. If Mr. Walker can prevail on some of our South American colleagues to turn down the audio gain when their XYL's are at the mike, it would be all to the good, but the impact of type-approval requirements on us would be an increase in the cost of our purchased equipment and a serious burden on the home-brew addicts, with little resulting difference on the air. This scheme sounds like make-work to me.

I will not dwell on the questions Mr. Walker poses on behalf of the ITU, because they simply ask why there should be an Amateur Radio Service in the first place! If we are to be put into the position of defending our existence, it will take more than an editorial in Crosstalk.

Perhaps the most frightening section of the article is that in which Mr. Walker presents some very dubious numbers on spectrum bandwidth required versus words per minute versus operating mode. Aside from the doubtful credibility of the data (1000 cw signals per 100 KHz, 33 SSB signals per 100 KHz), we have the entirely new concept of efficiency in amateur spectrum use, and all of the problems of defining effectiveness and efficiency and of defending our ways of doing things.

Well, it's "so-what" time in this particular expose. What does it all mean, and what can we do about it? I wish I knew. You can register your views with the ARRL, and if yours coincide with theirs, and if they can exert useful influence, justice will triumph. You can also send an original and 14 copies to FCC in Washington; evidence so far indicates that this is a boon to the paper industry but has little other effect. The CB'ers are more offensive (no pun intended) than defensive in their approach to government. It will be interesting to see how successful they are.

Well, that's about it for now - 73, CUL -

PAUL

THE 220 MHz STEAL

By PAUL WEISZ, K6YQ

Be advised that the FCC is evaluating a proposal from the Electronics Industries Association (EIA), which would take at least 1 MHz from the amateur 220-225 MHz band for use in a new Class E Citizens Radio Service. You may send your views on this exercise (Docket 19759) to the FCC, Washington, D.C. 20554, in the form of reasoned arguments, original plus 14 copies. Recommended reading is QST, August 1973, page 88, and/or 73, August 1973, page 37. Time constraints (and other considerations) will probably prevent a TRW/ARC Club entry in this paper blizzard; the deadline for comments is 20 September. Some aspects of this matter are presented below:

1. Whatever form a new Class E Citizens Radio Service may take, there seems to be no justification for implementing it at the expense of the Amateur Radio Service. The 220 MHz band is on the verge of intensive amateur development, as the 144 MHz band becomes saturated. The government has complete control of the 225 - 440 MHz band now; why not put Class E into 225 - 226 MHz? Take 0.6 percent of the government band for Class E rather than 20 percent of 220.
2. If FCC wants to ensure disciplined, responsible and appropriate operation in the Citizens Radio Service, the best way to do it might be to make the license a costly one. A fee (or deposit) of say \$500 for a five-year license would be trivial for a business concern or a true sportsman, and would probably filter out Monkey Man and the Green Phantom pretty well. These fees would also fund a large enforcement staff, if one is required.
3. The motives of the EIA in making this proposal are not clear. If they are proposing that American industry manufacture 10 million radios for Class E, that sounds pretty good. However, the EIA has also been referred to occasionally as the Electronic Importers Association. Ten million rice-box radios won't help the domestic industry a bit, and will tilt the balance of payments still further in the wrong direction. How about a Buy-American clause for Class E equipment in the FCC requirements? Or a healthy protective tariff from Congress on Class E equipment.

4. Several people — Wayne Green, Stewart Meyer, and the United CB'ers of America (strange bedfellows) have come up with schemes which will provide "new" hobby-class operator privileges without requiring Morse code capability. The Amateur Radio Service is hobby-class radio, gentlemen. A general-class level of theory understanding and 5 WPM cw capability will unlock the door to all the amateur VHF/UHF spectrum above 146 MHz. The theory is vital for anyone who is going to put a 25 or 100 watt signal on the spectrum; as for the cw, I am taking bets that I could teach a chimpanzee to copy and send 5 wpm in about 80 hours! The mess on 27 MHz shows what untrained people can do to a hunk of spectrum. Nothing is more frightening than ignorance in action.

The above reflects my personal views, of course, and forms the basis for my entry in the Docket 19759 Xerox Sweepstakes. Make up your own words and/or music; first prize is an evening on 11 meters, and second prize is two evenings!

ACTING SECRETARY'S REPORT

By PAUL WEISZ, K6YQ

The regular monthly meeting of the TRW/ARC Executive Committee was called to order three times the week of 13 August 1973, without ever attracting a working quorum. The best attempt was on Thursday, August 16, at 12:00 noon. Present were Weisz, Carter, Kennedy, Dean and Lee. The following were the results of discussions among the group, and will be administrative policy only until an additional voting member can be found to concur:

1. The offer to Messrs. Ogg and Cardenas to use the Crosstalk as a forum for divergent views on 1.46.34/94 repeaters on an equal-time basis will be renewed, as nothing has been heard from either.
2. The Logo contest will be extended for one month, until 30 September, as only two entries have been received. Contrary to the announcement at the last general meeting, Executive Committee members may enter, if they abstain from the judging.
3. Tony Cardenas has requested club support for a VHF/UHF repeater project in which he is currently engaged. Ted Carter will chair a small study effort to evaluate the project and recommend the nature and extent of club participation. A report is due by 1 October if possible.
4. The OSCAR III solar panels have been loaned to the EE Department at UC Berkeley. The loan is for a one-year term, renewable by agreement, with a recall possible in 45 days from our request.
5. Joel Wineman will generate and distribute a membership mailing for the August 29 evening meeting (that's what he gets for not being present!).
6. Paul Weisz reported that the 1973 Field Day report was sent off on 27 July to beat the 1 August deadline. Primary credit to Jerry Dean, who stroked the computer and did the hard work of preparing the entry.

THE WHO'S GOT IT DEPARTMENT

Someone on the Executive Committee must have the Japanese amateur radio magazine containing the glorious color photos of Paul Weisz and Ted Carter, and the translation of the text. This is Weisz's copy, and he would like it back so he can seal it in a time capsule for posterity.

FAME AND GLORY DEPARTMENT

There was an interesting article in the View Section (front page, no less) of the LA Times for August 16 featuring Herb Gleed, W6FQ and his activities in support of a balsa raft expedition floating from Ecuador to Asia with nine men, two monkeys, some kittens and other wildlife. The article presented some interesting aspects of the expedition as well as Herb's ham radio operations. Great stuff, Herb, we can use all the publicity we can get.

THE INTERNATIONAL RELATIONS DEPARTMENT

During the past year we have had several foreign amateur radio visitors to one or another club function. This past winter we welcomed CE3ANB, Jaimie, and JA1QJT, Toki, and introduced them as best we could to the workings of American ham radio and the TRW/ARC.

At the 25 July meeting, we were pleased to have as our guest JF1LWU, Tomoyasu Kato. Tom (or Kato) is program manager for Mitsubishi Electric on the communication satellite project in which they are participating with TRW. Hope to see more of Kato on future visits!

TREASURER'S REPORT

By JERRY DEAN, WA6GVO

Balance on hand June 30, 1973 \$448.21

Receipts

Dues (new)	\$ 26.00
Dues (renewals)	18.00
QSL Orders	19.75
Novice Class	49.50
Extra Class	55.00
	<u>\$168.25</u>

Expenses

QLS Printing	\$ 13.75
Field Day (food)	7.18
Door Prizes	12.88
Books for Classes	24.75
QST Subscription	7.50
Fortune Room Steak House	10.00
Postage	1.30
	<u>\$ 77.36</u>

Balance on hand July 31, 1973 \$539.10

LOGO CONTEST

By JOEL R. WINEMAN, WA6WRB

Due to underwhelming response to the Logo Contest — we are making two changes in the contest rules:

1. Deadline for entries has been extended to September 28, 1973.
2. Members of the Executive Board may enter as long as they exclude themselves from judging.

Your changes are better than ever to win — submit your entry today!

WANT AD DEPARTMENT

Wanted — Schematic or Manual for ELVICO Transmitter and Receiver

Will borrow, buy, trade or rent. Instead of money, if desired, I can pay with mechanical filters, crystal filters, or several different types of small signal transistors.

DALE WOLFE, 62240
Home Phone — 534-2839

ACTIVITY AT WB6WPO

BY: Roger Trapp, K6SSN

Activity at WB6WPO has continued slow, but thanks to tips from Prez on when and where the choice DX could be found, the new DXCC totals are impressive. The final cards arrived to complete confirmation for WAS and the application is ready to mail. The following is a summary of activity for the past month:

12 July - 20 August '73

<u>DX Worked</u>	<u>Band</u>
Sweden	20
Finland	20
Willis I.	20
Dom. Rep.	20
Azores I.	20
Switzerland	20
Tonga	20
Australia	20
Asiatic Russia	20
Thailand	20
Phillipines	20
Belgium	20
Indonesia	20
Nepal	20
Peru	20
E. Malaysia	20
Canton I.	20
Ogasawara I.	20
Wake I.	20
Port. Timor	20

States Worked Band

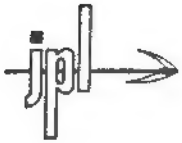
California	40
Georgia	20
Kansas	20

OPERATORS DURING PERIOD

K6AWO
W6NHX
WA6RZL
K6SSN
K6YQ

The following is a status report for DXCC and 5BWAS.

		5BWAS					
	DXCC	6	10	15	20	40	75
Worked	118	4	20	26	41	27	32
Confirmed	81	3	17	20	26	17	25



JPL Amateur Radio Club

W6VIO

AA-3 Bulletin No. 2
July 20, 1973

TO: Interested Radio Amateurs
FROM: Jay Holladay, W6EJJ
SUBJECT: AMSAT/OSCAR West Coast Test Flight AA-3

Attached is an announcement of the West Coast aircraft test flight of the OSCAR 7 432 MHz to 145 MHz translator, sponsored by the JPL Amateur Radio Club. Please note that the date for the full test flight is now October 6, 1973.

The AMSAT Board of Directors has voted to support the test flight. The JPL ARC is completing arrangements to obtain the prototype translator, and planning of the flight is now in progress.

Check into the West Coast AMSAT Net to obtain the latest test flight information. The net meets on 3850 kHz at 8 P.M. PDT on Monday nights. In August we will start a separate net for state-wide planning and coordination of the test flight.

Please pass the word on the test flight to your local club, bulletin, etc. We hope you will be participating in this activity with us.

73,

Jay Holladay, W6EJJ
Project Manager, West Coast
Test Flight

July 20, 1973

JPL AMATEUR RADIO CLUB

OSCAR 7 AA-3 TEST FLIGHT

The JPL Amateur Radio Club will sponsor a West Coast aircraft test flight of the OSCAR 7 432 MHz to 145 MHz translator. The flight plan will be similar to the successful AA-2 test flight of OSCAR 6 in September 1971, and the same pilot and aircraft will participate.

Schedule for the AA-3 test flight calls for a shakedown flight in the Southern California area on September 22, 1973. The full scale flight will take place on October 6, 1973. and this flight will cover the state from San Diego to San Francisco.

We will fly the OSCAR 7 prototype translator built by DJ4ZC/DJ5KQ.

Operating frequencies are:	Uplink	432.150 MHz
	Downlink	145.950 MHz.

Bandwidth is ± 25 kHz from these center frequencies, and the translator will invert the input passband. (i.e. 432.125 MHz uplink results in 145.975 MHz downlink, and USB input will result in LSB output.) Recommended modes of operation are CW and SSB. A beacon will output on 145.980 MHz.

W6EJJ is Project Manager for the test flight, and W6QJO is secretary. Contact either of them or K6PGX for further information.